

In the Claims:

Please amend claims 1-8, 15 and 16 as follows:

Sub  
Cl

1. (Currently Amended) A liquid crystal device comprising:  
a liquid crystal material characterized by spontaneous polarization,  
being responsive to an applied signal for writing data and controlling a light  
transmittance of said material, wherein a voltage of said signal ~~for writing data,~~  
corresponding to an image to be displayed and switched by thin film transistors, ~~to said~~  
~~material~~ is offset positively or negatively from 0 V at said material except during  
~~applying said signal~~ application.

2. (Currently Amended) The liquid crystal device of claim 1 ~~claim 1~~  
wherein said signal is offset positively or negatively so that a light transmission through  
said liquid crystal material being driven by said signal ~~becomes to be~~ is blocked.

3. (Currently Amended) A liquid crystal device comprising:  
a first substrate including a first electrode on a first face thereof;  
a second substrate including a second electrode on a second face  
thereof, wherein said second substrate and said first substrate are sealed spaced apart so  
that said first and second substrates face each other;  
a liquid crystal material having spontaneous polarization filled in a  
space between said first and second substrates;

a first voltage generating circuit for supplying a voltage to said first electrode; and

a data signal circuit for supplying a data pulse to said second electrode,

wherein a voltage across said liquid crystal between said first and second electrodes is kept ~~positively or negatively~~ positive or negative with respect to a reference voltage of said device except during said data pulse being applied application when an image is displayed.

4. (Currently Amended) The liquid crystal device in claim 3 wherein said data pulse is offset positively or negatively so that a light transmission through said liquid crystal material being driven by said pulse ~~becomes to be~~ is blocked.

5. (Currently Amended) The liquid crystal device of any one of claims 3 or 4 ~~claim 3 or 4~~ wherein said second substrate ~~having~~ has an active element electrically connected to said second electrode so as to electrically control a picture element.

6. (Currently Amended) The liquid crystal device of claim 5 wherein said voltage supplied by said first voltage generating circuit is offset so that a voltage across said liquid crystal material between said first and second electrodes is kept

~~positively or negatively~~positive or negative with respect to said reference voltage of said device except during said data pulse ~~being applied~~application.

7. (Currently Amended) A liquid crystal panel comprising:

a first substrate including a first electrode on a first face thereof;

a second substrate including a second electrode on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second substrates face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;

a first voltage generating circuit for supplying a voltage to said first electrode;

a data signal circuit for supplying a data pulse to said second electrode; and

a light source for emitting more than monochromatic lights, each of said monochromatic lights being emitted time divisionally toward said first or second substrates,

wherein a voltage across said liquid crystal material between said first and second electrodes is kept ~~positively or negatively~~positive or negative with respect to a reference voltage of said device ~~during except during~~ said data pulse ~~being applied~~application when an image is displayed.

8. (Currently Amended) A liquid crystal panel comprising:

a first substrate including a first electrode on a first face thereof;

a second substrate including a second electrode on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second substrates face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;

a first voltage generating circuit for supplying a voltage to said first electrode;

a data signal circuit for supplying a data pulse to said second electrode; and

polarizer films provided on each outer face of said first and second substrates,

wherein a voltage across said liquid crystal material between said first and second electrodes is kept ~~positively or negatively~~ positive or negative with respect to a reference voltage of said panel except during said data pulse ~~being applied~~ application so that said liquid crystal material blocks a light transmission through said liquid crystal material when an image is displayed.

9. (Previously Presented) A liquid crystal display panel comprising:

a first substrate including a common electrode on a first face thereof; a second substrate including data signal electrodes, scanning electrodes, and switching elements which are connected to one of said data signal electrodes and one of said scanning electrodes on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second faces face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;

a common reference voltage generating circuit for defining a reference voltage of said data signal electrode; and

a common electrode voltage generating circuit for supplying a voltage to said common electrode, wherein said common voltage is offset to positive or negative voltages when an image is displayed.

10. (Original) The liquid crystal display panel of claim 9 wherein said liquid crystal material having spontaneous polarization is ferroelectric liquid crystal material.

11. (Original) The liquid crystal display panel of claim 9 wherein said first substrate has a color filter.

12. (Previously Presented) A liquid crystal display panel comprising:

a first substrate including a common electrode on a first face thereof;

a second substrate including data bus lines, scanning bus lines, and switching elements which are connected to one of said data bus lines and one of said scanning bus lines on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second faces face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates; and

a common electrode voltage generating circuit for supplying a voltage to said common electrode; and

a common reference voltage generating circuit for defining a reference voltage of said data bus lines, wherein said reference voltage is offset to positive or negative voltages when an image is displayed.

13. (Original) The liquid crystal display panel of claim 12 wherein said liquid crystal material having spontaneous polarization is ferroelectric liquid crystal material.

14. (Original) The liquid crystal display panel of claim 12 wherein said first substrate has a color filter.

15. (Currently Amended) The liquid crystal display panel claim 12 further comprising:

polarizer films provided on ~~each~~the outer faces of said first and second ~~substrates~~substrates, wherein said common voltage is offset so as that a light transmission of said liquid crystal material becomes to be block.

16. (Currently Amended) The liquid crystal display panel claim 12 further comprising:

*cancel*  
a light source emitting a plurality of monochromatic colors, wherein each monochromatic color is emitted by said light source time divisionally in synchronism with ~~aan~~ operation of said liquid crystal display panel.